

Claims

1. A process for preparing 4,6-dichloropyrimidine, characterized in that 4-chloro-6-hydroxypyrimidine is reacted with an acid chloride.
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2. The process as claimed in claim 1, characterized in that  $\text{PCl}_3$ ,  $\text{POCl}_3$ ,  $\text{PCl}_5$ ,  $\text{R-PCl}_2$ ,  $\text{R-PCl}_4$ ,  $\text{R-POCl}_2$  and  $\text{R}_3\text{PCl}_2$ , where R represents optionally substituted  $\text{C}_6\text{-C}_{10}$ -aryl or optionally substituted  $\text{C}_1\text{-C}_{10}$ -alkyl, acid chlorides of the formula  $\text{R}'\text{-CO-Cl}$  with  $\text{R}' = \text{chlorine}$ ,  $\text{C}_1\text{-C}_{10}$ -alkoxy,  $\text{C}_6\text{-C}_{10}$ -aryloxy,  $-\text{O-CCl}_3$ ,  $-\text{CO-Cl}$ ,  $\text{C}_5\text{-C}_{11}$ -heteroaryloxy with 1 to 3 heteroatoms from the group N, O and S, where the alkoxy, aryloxy and hetaryloxy radicals may optionally be substituted, and  $\text{SOCl}_2$  are employed as acid chloride.
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3. The process as claimed in claims 1 and 2, characterized in that the required acid chloride is generated in situ.
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4. The process as claimed in claims 1 to 3, characterized in that 4-chloro-6-hydroxypyrimidine is employed in isolated form or in the form of a reaction mixture containing 4-chloro-6-hydroxypyrimidine.
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5. The process as claimed in claims 1 to 4, characterized in that at least 1 mol of acid chloride is employed per mole of 4-chloro-6-hydroxypyrimidine.
6. The process as claimed in claims 1 to 5, characterized in that an aliphatic solvent, an aromatic solvent, a nitrile, an N-containing solvent, an ether or a polyether is employed as solvent.
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7. The process as claimed in claims 1 to 6, characterized in that it is carried out at temperatures in the range 0 to  $200^\circ\text{C}$ .
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8. The process as claimed in claims 1 to 7, characterized in that it is carried out under a pressure in the range 0.1 to 50 bar.
- 5 9. The process as claimed in claims 1 to 8, characterized in that 4-chloro-6-hydroxypyrimidine is added to the acid chloride with, where appropriate, a solvent.

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A1

add  
a2